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ABSTRACT

OF THE

PROCEEDINGS

OF THE

OBSTETRIC SOCIETY OF EDINBURGH.

FOR 1847-1848.

SESSION VII.

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OBSTETRIC SOCIETY OF EDINBURGH.

SESSION VII.

First Meeting, *December* 22, 1847.—Dr Simpson, President, in the Chair.

CASE OF TWINS—EXPULSION OF THE PLACENTA OF THE SECOND CHILD AFTER THE BIRTH OF THE FIRST.

Dr Woodhead met lately with the following abnormal expulsion of the placentæ in a case of twins. After the birth of the first child, the second presented naturally. When the membranes ruptured, a considerable quantity of blood escaped along with the water. On making an immediate examination, Dr Woodhead found a placenta lying in the passages, on removing which he found it to be that of the infant still within the uterus. As the bleeding did not continue, he left the infant to be expelled by the uterine contractions. It was not born till twenty minutes after the placenta had come away; but, although still-born, it revived on the ordinary means being used, and it has continued to do well. The placenta of the first infant came away afterwards in the usual manner.

QUESTION OF HEMORRHAGE IN TWIN CASES FROM DETACHMENT OF THE PLACENTÆ, ONE CHILD REMAINING IN UTERO.

Dr Simpson observed, that cases like Mr Woodhead's were strongly illustrative of the curious pathological fact, that *complete* detachment of the placenta was accompanied by little or no hemorrhage; whilst the *partial* detachment of the placenta almost inevitably gave rise to severe and dangerous flooding. He cited different instances of complications in twin-births illustrative of this obstetric law, as for example the following,—

1. When, after the birth of the first child in twins, the placenta of that child is accidentally expelled and removed, the other retained infant and placenta generally remain in utero without flooding. Mauriceau, Denman, Cazeaux, &c., had stated, that under such circumstances flooding must necessarily occur, but the fact was—it did not, its non-occurrence being in obedience to the general law, that when the detachment of the placenta is complete, there is little or no tendency whatever to any attendant hemorrhage. Dr Simpson cited cases from Dr Collins' treatise illustrative of this, and mentioned others of the same kind which had been communicated to him by Dr Dawson, Dr Dickson, Dr Campbell, &c. "Thus," writes Dr Dawson of Newcastle, "I have seen two cases of twins, where the placenta of the first came away before the birth of the second child. There was no hemorrhage in either case. Mr Lang (Mr Dawson adds) has met with two cases of this description, and also without hemorrhage;" But,

2. When, after the birth of the first child in twins, the placenta of the second child is accidentally expelled, and an infant and placenta yet remain in utero, still there is generally no attendant flooding. Mr Woodhead's case was an illustration of this. A case of the same kind had been related to Dr Simpson by Dr Andrews, lecturer on midwifery at the Westminster School, London. One of Dr Andrews' pupils was in attendance. A placenta was

expelled after the birth of the first child. Little or no hemorrhage occurred till the second infant was born. Some time afterwards, it was found that the previously expelled placenta belonged to it, and the still retained placenta belonged to the child that had been first born. Here, in a case of twins, there was a child and a placenta remaining in utero; but the remaining placenta was not the placenta of that child. And the placenta which was previously detached and separated, had necessarily torn asunder the bag of membranes, leaving the portion of uterine surface, to which it was itself affixed, exposed, without that exposure leading to any marked degree of hemorrhage.

3. In twins, between the birth of the first and of the second child, the two separate or double placentæ belonging to both are occasionally expelled, and no hemorrhage follows, although there is one child still retained in utero. Dr Dewar of Dunfermline had reported two cases of this kind to Dr Simpson. In one "the placentæ were firmly united, and were discharged after the birth of the first child. There was *no* unnatural discharge of blood. The mother did well." In the second case, "the mother had borne several children. The first child (which was at the full time) presented by the feet, and immediately after its birth, the two placentæ, connected by a membranous but not vascular band, were expelled. Labour followed briskly, and, in little more than five minutes, the second child, which presented naturally, was born. *The hemorrhage* (Dr Dewar adds) *was very slight*, and not greater than what occurs after some ordinary labours. The mother did well." It may be considered that, in these two cases, the interval between the expulsion of the placenta and the birth of the child, was too brief to allow accurate observations to be made upon the degree of existing hemorrhage. This objection is answered by a third case of the same kind, mentioned to Dr Simpson by Dr Protheroe Smith of London. "I was (he writes) called to a patient some time since, who had given birth to one child, immediately after which a large double placenta followed without hemorrhage, leaving a second child in utero, which was expelled, dead of course, *three or four hours afterwards, without further discharge of blood.*" Dr Tyler published, two years ago, a similar case in *The American Journal of the Medical Sciences* for October 1843. After the birth of the first child, a double placenta was discharged. Two hours afterwards, the shoulder of the second child was found presenting, and the uterus in a state of "hour-glass contraction." Many unsuccessful efforts to turn the fœtus were made. At last its thorax was evacuated, and the breech brought down. The mother made a good recovery. "Here (observes Dr Tyler) we have a case not merely of simple placenta prævia, but a double surface exposed, there having been two placentæ; the fibres of the womb, first, in a state of rigid contraction; then the irritation consequent upon the performance of the embyrotomy; and lastly, a state of excessive relaxation, *and still not a drop of hemorrhage*, and the female entirely recovered."

THE APPEARANCE OF THE AREOLA AS A SIGN OF PREGNANCY.

Dr Simpson showed to the Society a woman seven months gone with child whose breasts gave no indication whatever of her pregnant state. The case was a peculiar one. There was no doubt of her being pregnant, as the fœtal heart could be distinctly heard; but, at an earlier stage, great doubt had been thrown on the nature of the case, from the presence of several large fibrous tumours in the walls of the uterus. These had even given rise to the suspicion, on the part of the physician she had consulted, that the fœtus was extra-uterine. She had been four years married, and was now pregnant for the first time. On examining both breasts, there is no appearance whatever of a single enlarged gland on the areola; besides, the areola is not at all tumid, and is scarcely darker than the surrounding skin. Dr Simpson had caused a drawing to be made of this breast, which he contrasted with another of the areola of a lady who had never been pregnant, but was suffering from great uterine irritation. In this last instance the areola was turgid, and of a dark brown colour, the papillæ were numerous and much enlarged, and the superficial veins very large and prominent. He had observed the same appearances as in the last case in other non-pregnant women. In one the woman could never be pregnant, as the uterus was malformed, and not more than one inch and a half in length. In another case the mrrks were so distinct, that the late Dr Hamilton, trusting mainly to them as undoubted indications of pregnancy, two or three years before pronounced the lady to be pregnant, when the uterus was only enlarged by a mass of fibrous tumours.

Dr Kerr had under his care a lady who is now four months gone in her third pregnancy. The areola is not at all discoloured ; but the papillæ are much enlarged and prominent.

ACCIDENTAL HEMORRHAGE.

Dr Moir had recently met with a case of uterine hemorrhage, following the escape of an unusually large quantity of liquor amnii during labour. He believed that the hemorrhage in this case arose from separation of the placenta, owing to the great contraction of the uterus consequent on the discharge of the water from its cavity. The cause producing the hemorrhage in this case, was the very measure recommended by many to arrest accidental hemorrhage —viz. rupture of the membranes.

INDUCTION OF PREMATURE LABOUR.

Dr Moir stated, that, in inducing premature labour, in a large number of cases he had followed the plan recommended by the late Dr Hamilton. He began by opening up the os uteri with the finger, and separating the membranes. This he repeated every day, or every second day, separating the membranes farther and farther, first with the finger, and afterwards with a round or bent wire. Under this treatment, labour generally comes on from the fourth to the tenth day. Dr Hamilton recommended, as a general rule, that the period for the induction of labour should be at the middle of the eighth month. Dr Moir considered one very great advantage of this plan to be, that the membranes did not, in general, rupture till the usual period in an ordinary labour, after the os uteri was well dilated—a circumstance of very great importance for the safety of the infant. In two cases in which he had brought on labour by the introduction of sponge tents, the membranes were ruptured before the ocmmencement of labour.

When the labour did not offer to come on after a week from the time he had begun to separate the membranes, Dr Hamilton was in the habit of passing up a male catheter with a stilet by the side of the membranes, for a few inches as far as they were separated, and piercing them there with the stilet, and allowing a small quantity of the liquor amnii to escape. Dr Moir stated that he had still in his possession the instrument Dr Hamilton used for this purpose.

Dr Simpson had latterly used conical-shaped sponge tents for opening up the os uteri, in all the cases where he had had occasion to bring on premature labour. These tents were made of sponge dipped in solution of gum arabic, and dried under very strong compression. It is necessary generally to use several tents, and the last one must sometimes be very large. It is not by any means requisite to use the speculum in introducing these tents, as has been recommended and practised in Germany; they are very easily introduced with the finger alone, or by means of a simple bent wire handle, the point of which is passed up into their larger extremity. They are easily applied—cause the patient little or no pain or mischief, and they have generally the os uteri well opened before the labour begins. He had never, in any case, seen the membranes ruptured by them before the commencement of labour. And he believed that the preservation of the membranes was a matter of the first moment in regard to securing the preservation of the child. Dr Hamilton had preserved the membranes, and saved fifty out of fifty-seven children ; Dr Merriman had ruptured the membranes, and saved twenty-three out of forty-one children. Dr Simpson had noticed lately a proposal to induce labour by injecting water between the membranes and the uterus, in order to separate them.

He considered this would be a dangerous practice, as the placenta might be separated as well as the membranes, and hemorrhage consequently ensue.

ARTIFICIAL REMOVAL OF A VERY LARGE FIBROUS TUMOUR IMBEDDED IN THE POSTERIOR WALL OF THE UTERUS.

Dr Simpson explained to the Society the mode in which he had lately removed a large fibrous tumour from the posterior wall of the uterus. The patient was forty-six years of age ; she had borne ten children, the youngest being six years old, naturally strong and healthy. During the last two years she had been subject to severe floodings, which recurred every fortnight, and had reduced her excessively. Her general health had become quite broken up, and for several months she had suffered much from sore throat, and general irritation of the mucous membranes. Dr Simpson found, on examination, a large fibrous tumour imbedded in the back wall of the uterus, and which protruded downwards upon the top of the vagina in a rounded form, the os uteri and uterine cavity lying in front of it—as ascertained by the uterine sound.

Dr Simpson (accompanied by Drs Malcolm, Zeigler, Weir, and Keith) made an opening, by means of caustic potass, into the most prominent part of the tumour, about one inch behind the os uteri. It extended through the layer of uterine substance, and into the mass of the tumour itself. On passing up the finger into the hole thus made, it was found that it could be passed easily between the substance of the tumour and the uterine wall. The tumour, in fact, seemed to be very loosely connected with its uterine envelope, and could be separated from it with great ease as far as the finger could pass between them. Two days after the caustic was used, Dr Simpson found the artificial opening enlarging like the os uteri in labour, and the tumour beginning to protrude through it. It opened up gradually, the patient taking some ergot, and on the fifth day a large piece of the tumour was found pushed low down into the vagina, while the edge of uterine wall could barely be felt, encircling it like the rim of the os uteri when fully dilated. The abdominal tumour had subsided considerably. On the eighth day, Dr Simpson attempted to pass a ligature round the mass, but found it could not possibly be made to include but a very small portion. He separated, however, and brought away a small fragment, not without giving a good deal of pain. The tumour now gradually and more completely filled the vagina. The uterus, however, seemed unable to throw it off entirely, and the patient was getting exhausted from the quantity of the discharge, which was very fetid and offensive. On the 12th day, Dr Simpson, while she was completely under the influence of chloroform, passed up his hand by the side of the tumour, completed the separation of the remaining adhesion (like an adherent placenta), and brought away the tumour in one mass. This was done in a very few minutes. The patient awoke up quite quietly, said she had felt no pain whatever; nor did she complain at all of pain in the region of the uterus subsequently. She proceeded very well for three days, her pulse not above eighty ; when, in consequence of her nurse taken unwarrantable liberties with her in making her get out of bed, washing, &c., she was seized with rigors, followed by severe sore throat and irritative fever. This completely exhausted her remaining strength, and she died six days after the tumour was removed. The body was examined by Dr Bennett, Dr Scott, Dr Simpson, and Dr Keith. The peritoneal surface of the uterus was perfectly healthy, and showed no trace whatever of inflammatory action. The cavity in the back wall, in which the tumour had been imbedded, was much reduced in size, and appeared to be tending to a healthy cicatrization.

The tumour weighed three pounds eight ounces when removed. It must have been somewhat heavier, as the great discharge for several days was no doubt from partial softening and decomposition of the tumour. Various French surgeons had cut down upon such tumours, and enucleated them by instruments, or by the hand. In the above case, Dr S. had merely formed an artificial opening into the uterine cyst (as it were) containing the tumour, and then allowed the uterine walls, which are hypertrophied around such masses (exactly like the uterus in pregnancy), to push down and expel the foreign body. It was, he believed, the first time this new operation had been performed, and the largest fibrous tumour ever yet enucleated. The tumour, on division, was shown to be the common fibrous tumour of the uterus.

SECOND MEETING, *January* 12, 1848.—DR SIMPSON, President, in the Chair.

THE following gentlemen were elected office-bearers for the ensuing Session:—Dr SIMPSON, *President;* Dr MOIR and Dr MALCOLM, *Vice-Presidents;* Dr CUMMING and Dr KEITH, *Secretaries.*

ON AN INSTRUMENT FOR THE INHALATION OF CHLOROFORM.

Dr Cornwall read a paper on chloroform inhalers; a variety of different kinds were placed on the table. He considered that the simpler the construction the better, provided it efficiently answered the purpose, as any thing complicated and imposing was very apt to startle and alarm patients. He showed a contrivance of his own, which had proved to be very suitable and convenient. It is a tin box which contains a phial of chloroform marked in drachms. At the bottom of the box are three layers of flannel, over which is a piece of perforated zinc. In using it, a drachm of the chloroform is poured in, and it is then applied over the mouth and nose of the patient; the edge being of a shape to fit closely to the cheeks, the requisite supply of air comes through an opening at the upper part of the box. In obstetric cases, where it is wished to keep up the soporific effect for some hours, or during surgical operations where there are few assistants, this inhaler can easily be retained in its place by means of a tape attached to the small rings at the ends of it, and, when so applied, any additional quantity of chloroform required can be put in by means of a filler.

Dr Cornwall stated that, in the hands of those expert in the use of this anæsthetic agent, a towel, or handkerchief, or sponge, could no doubt be made to do well; but it required both care and practice to arrive at proficiency in this, whereas, with his inhaler, he considered it almost impossible for any one to go wrong. He viewed the vapour of chloroform as a fluid—it being, in fact, much heavier than atmospheric air—and his inhaler as a drinking cup, which supplied each inspiration not only of the mouth, but of the nostrils also. In this way, and from the extensive evaporating surface, the full narcotic effect is at once induced; and this is of very great importance, preventing the awkward and injurious tendency of its exciting and sickening action. Dr Cornwall considered the snoring, so commonly induced, indicative of the state of insensibility to pain, and, therefore, of the proper time to commence operations. He advised, however, that, while deep snoring lasted, the supply of the vapour should be reduced by holding the inhaler at a little distance from the surface. He was of opinion, that more attention should be paid to the effect produced on the pulse and features than to the quantity of chloroform given. At the same time, with a narcotic so powerful, he thought it right always to measure the dose put into the inhaler.

The advantages of this inhaler are, efficiency and safety; it effects a very considerable saving of chloroform, and thoroughly prevents the contact of the fluid with the lips or face, and the dripping of it on the dress. Its portability also may be mentioned. It is carried conveniently in the pocket, and, as to its cost, it can be had for 3s. 6d. Dr C. found that rest in the recumbent position, quietness, and an empty stomach, are circumstances favourable to the chloroform taking proper effect speedily.

SOME REMARKS ON THE MODE OF ADMINISTERING CHLOROFORM.

Dr Simpson showed the Society a variety of instruments used in England for administering chloroform,—Salt's, Dr Protheroe Smith's, Mr Robinson's, Hooper's, &c. He considered Dr Cornwall's as good as any, and preferable from its simplicity; but he entirely objected to it, or any one, being tied upon the face of the patient, as he feared that accidents would inevitably happen from too large a dose being thus sometimes administered. In using the handkerchief even, he never applied it quite close to the face of the patient, but always allowed a sufficiently free access of air. As to the quantity of chloroform to be used, Dr S. judged entirely by the effect on the patient. He believed that, in surgery, the symptom most to be relied upon as indicating a thoroughly anæsthetic state, was slowness of respiration, or a degree of snoring, or stertorous breathing. After the appearance of this symptom, it is only needful to continue the inhalation, from time time, by intermissions; and, by repeated applications of the handkerchief, the patient ought to be kept in the same sopor during the whole of the operation. In midwifery, Dr S. believed that this deep degree of anæsthesia was, in ordinary circumstances, not required. He had found that, when administered so as to cause stertorous breathing, the uterine contractions generally ceased, and did not return till the effect had, in some degree, passed off. He had found, therefore, that the chloroform given in a surgical dose was very useful whenever he wished to stop the uterine contractions, as in cases where turning was necessary, and many other obstetric operations. In cases of natural labour, he generally began with a large dose of chloroform, so as to bring the woman at once completely under its influence. This mode of proceeding prevents the chance of any excitement; and, although it occasionally may stop the pains for a few minutes, especially if the labour is still in an early stage, yet the contractions recur as soon as the deeper state wears off, which it usually does in two or three minutes. The depth of the sopor is allowed to diminish by merely withholding the handkerchief till a pain comes on; and then the anæsthetic state is kept up by its reapplication, for two or three inspirations every four or five minutes; or what is better, with each succeeding pain. The patient should be kept unconscious, but not deeply so, till the head was passing the vulva, when a deeper anæsthesia was required.

CASE OF DOUBLE CEPHALHÆMATOMA.

Dr Simpson shewed a child two weeks old, with a well-marked large and defined cephalhæmatomatous swelling on each parietal bone, with the hard rim well marked at different points. He had never seen it on both sides except in this case. In this, as in most other cases, the tumours had not been observed till the first washing of the child, having come on, or at least grown greatly for some hours after birth. The effused blood was already becoming absorbed, and, by leaving the case entirely to nature, a cure would soon be effected. The effusion was between the skull and pericranium. He had watched various cases during the process of a natural cure, and he several times found that a layer of bone is formed on the inner surface of the separated pericranium, which can sometimes be distinctly felt after a time to crackle under the finger like parchment,—and, as the fluid gets absorbed, the two plates of bone gradually approximate and come together. Dr S. believed that such cases were often mistaken and mistreated, by too active measures being employed. He had now had an opportunity of seeing a number of cases of cephalhæmatoma and had never seen any treatment required but time and patience. The difficulty in their management generally, consisted in keeping the friends and others from doing something or other to them when nothing, in reality, was required.

CONGENITAL CEPHALIC TUMOUR.

Dr Keiller communicated the following particulars of a case of *encysted congenital tumour*, which he had recently seen in Dundee along with Drs Moon and Malcolm, who were subsequently induced to attempt its removal by puncture and ligature.

The tumour, which was of a pyriform shape, elastic, and quite compressible, was situated in the region of the occiput, towards the mesial line, and equalled in bulk the entire head of the child, which was, in every other respect, fully developed and well formed. It was impossible to detect by manipulation the coexistence of any cranial aperture or spinal fissure, the tumour becoming too tense on pressure to allow the exact nature and extent of its root to be satisfactorily ascertained. It could be compressed, and indeed roughly enough handled, without apparently causing any inconvenience to the infant; no additional tenseness or any pulsation occurred in it when the child cried, nor was the slightest diminution of its size observed to follow the firmest pressure to which it could be subjected.

The absence of convulsions or other immediate symptoms of pressure on the brain or spinal cord, seemed to indicate that, whatever may have been the connexion originally existing between the cyst or cysts, of which the bulk of the tumour was composed, and the cerebro-spinal membranes, little or no communication now apparently existed. The result of the following operation, had recourse to by Drs Moon and Malcolm, sufficiently proved, however, the existence, or rather the persistence of a cranial fissure opposite the pedicle of the tumour, which, being doubly encysted, one within the other, in all probability prevented the phenomena of compression as usually observed in cases of non-encysted encephaloid or spinal tumours, consequent on partial protrusion of the cerebro-spinal axis or its membranes, through clefts or immaturities of the cranial bones or spinal canal. The operation consisted in puncturing the tumour, with a view to evacuating its fluid contents, and afterwards removing its entire substance by the ligature or the knife. On opening the tumour or outer cyst, about eight ounces of straw-coloured serum escaped, by which the bulk of the swelling was only slightly diminished. The aperture was immediately enlarged, and on introducing a finger into it another large distended sac was distinctly felt; it also was laid open, when an additional quantity of serum gushed out. On again introducing the finger into the now flaccid sac, a third tumour, about the size of a pigeon's egg, and very tense, was found protruding through a narrow fissure in the occipital bone; but which could be readily reduced within the cavity of the skull, and that without causing the slightest symptoms of compression or inconvenience. After pushing this deeply-seated cyst within the occipital fissure from which it protruded, the larger or more external and flaccid sacs were surrounded by a ligature. The child sucked vigorously after the operation, and afterwards slept calmly for several hours. It gradually sank, however, on the following day. No *post-mortem* examination was permitted.

Dr Keiller, after citing other similar instances, and referring to the cases of congenital tumour of the neck, published by Mr Cæsar Hawkins, and those of congenital encysted tumour of the pelvis and spine, recorded by Mr Stanley, made some remarks upon the difficulty and importance of determining the true character of the various forms of congenital tumours in reference to the question of their cure by surgical interference, and particularly referred to the frequently observed fact, that in some cases of true encephalocele or spina bifida, (when the membranous cyst or tumour remains *continuous with the interior*, and not merely *connected with the exterior* of the membranes of the brain or the theca vertebralis), the insignificance of the aperture of communication, together with the extreme mobility of the pediculated tumour, and the total absence of symptoms of compression, even by the roughest handling, presented inducements to the surgeon to have recourse to operative procedure, which, however, notwithstanding the success which has attended the use of the knife in a few doubtfully and altogether exceptional cases, can scarcely be expected to terminate otherwise than unfavourably.

THIRD MEETING, *February* 9, 1848.—DR SIMPSON, President, in the Chair.

A FEW EXPERIMENTS WITH CHLOROFORM. BY DR T. M. LEE.

THE author began by alluding to the never-failing powers of annulling pain which this agent possesses, and to its complete safety when administered by those who understood its action and are skilled in the human frame; and afterwards related a case of labour in which he had recently given it with very gratifying effects.

But the object of his paper was to draw the attention of the Society to its property of securing rest, a point of the utmost importance in the treatment of almost all diseases. And he gave a detailed account of six cases in which he had administered it with this object in view, in every one of which its application was followed by the most satisfactory results. To wit, a case of acute rheumatism complicated with bronchitis; one of acute mania; one of urgent dyspnœa, depending on a combination of asthma with permanent contraction of both sides of the chest from pleurisy; one of aggravated hysteria; one of infantile remittent or hectic fever; and one of typhus. The ages of the patients varied from one to forty years; and the sleep which each dose of the chloroform induced was natural and refreshing, and of several hours' duration.

He had also witnessed its effects in many other cases, both in healthy individuals, and when given to prevent or remove pain; and stated that, while he had never known it to fail in producing almost immediate insensibility, he had not seen any disagreeable consequences from its use; except in a case of tooth-drawing, in which the power of expelling a few drops of blood that had trickled down into the wind-pipe was lost for a few seconds, causing not a little alarm among the bystanders. In two other cases also vomiting had taken place while the patients were under its influence.

Dr Lee concluded by describing a *post-mortem* examination he had made of a young rabbit intentionally killed by chloroform inhalation. The animal was apparently in perfect health at the time, but died in a few seconds after beginning to breathe the vapour. The brain, spinal cord, and windpipe, and the thoracic and abdominal viscera, were in the highest degree healthy-like; with the exception that there were a few hydatids adhering to the peritoneum, which, however, had not caused any apparent alteration in the membrane itself. The lungs were collapsed, spongy, and of a pale pink colour. The heart exhibited no appearance of disease. The right auricle and ventricle contained a small quantity of clotted blood. There was no congestion in any part of the body.

Dr Simpson believed, that when chloroform is given in order to procure sleep it should be given in a full dose at first, and that a continued action should be kept up by subsequently giving the patient a few inhalations of it from time to time, when he usually passes from the anæsthetic sleep into a natural sleep.

Several members of the Society mentioned a variety of cases in which they had successfully employed chloroform to relieve pain. Dr Purdie had used it in two cases of severe vomiting, with cramp of the stomach. In both cases it removed the pain and vomiting instantly and permanently. One of the patients was a woman above seventy years of age.

CASES OF SECONDARY FŒTUS.

Dr Keith read a notice of two cases of secondary fœtus observed by Dr Christie, Dundee. Dr Christie was summoned to a woman in labour by the attendant midwife, who had got alarmed from the presentation being unusual. He found the breech and one foot presenting, and with a little assistance a healthy child was soon born. An arm was now found presenting—and immediately the head followed of a fœtus which proved to be very putrid, and apparently of about seven months. The woman calculated on being at her full time, and the other child was full grown. There was but one placenta; but the portion of it that belonged to the blighted child was decayed-looking and easily lacerable—the other portion of it was quite natural and healthy. A similar case happened to Dr Christie several years ago, but in that case there was a double placenta.

Dr Simpson showed some specimens of "secondary fœtuses" from the University Museum, and stated some general propositions regarding them.

OBSERVATIONS ON THE INFLUENCE OF THE DEATH OF THE FŒTUS IN RELATION TO ITS RETENTION IN, OR EXPULSION FROM, THE UTERUS.

The general law which regulated the occurrence of labour in relation to the death of the fœtus, was well known to be this—1. That usually, in from one to three weeks after the fœtus died, uterine contractions supervene, and effect its expulsion. But to this very general law there were various exceptions. For, 2. If the embryo die in early embryonic life, and the fœtal appendages continue to live and vegetate, expulsion may not supervene for months. He showed a case of hydatiginous ovum, where the embryo was not larger than an embryo of the sixth week, but the placenta, or rather the chorion, was the seat of hydatiginous hypertrophy and degeneration; and the mother (a patient of Mr Girdwood's of Falkirk) calculated that she had passed the usual term of utero-gestation, not having menstruated for eleven months previously to the expulsion of this diseased ovum. 3. When the fœtus dies from the third month onwards (in consequence either of disease in its own organization, in its umbilical cord, or in its placenta), and a second twin living fœtus exists at the same time in utero, and this second fœtus continues to grow and keeps up a correspondence of development between the organ and its contents, the dead and undeveloped twin may be retained up to the full term of pregnancy, and be then born along with the other living and full-sized child. 4. When the dead fœtus is thus retained, it is preserved free from the decomposition usually following death by all access of air to it being prevented. Sometimes it retains its usual rounded appearance and form, if it continues to be surrounded by a sufficient quantity of liquor amnii; but in other cases where this protecting medium of liquor amnii is defective, the fœtus becomes gradually more and more squeezed between two forces,—viz. the parietes of the uterus on one side of it, and the other living twin or its membranes on the opposite side; and at last, when born, it is found compressed and *flattened* in form. Two such flattened fœtuses are in the University Museum; and many such cases are on record. 5. The birth of such undeveloped dead twins has sometimes given rise to most groundless and erroneous ideas of the existence of superfœtation. 6. Occasionally when one of twins died early in pregnancy, it was after a time expelled (when it happened [to be situated near or over the os uteri); afterwards the uterus closed, and pregnancy went on to the full time with the remaining living child. He mentioned a case of a lady aborting of a fœtus about the third month, going on in pregnancy to the full time, and then being delivered of twins; having originally conceived of triplets. 7, This last circumstance evidently led to the practical deduction,—that when a dead fœtus in its envelopes is expelled during the currency of pregnancy, and the uterus notwithstanding still remains large and apparently distended, its further contents should not be in any way interfered with; but rest and other means employed to avert the excitement of any additional uterine contraction, under the hope that a living twin may still be retained, and be carried onwards to the full term of utero-gestation

INTRA-UTERINE PERITONITIS IN THE FŒTUS.

Dr Simpson showed the body of a new-born infant which had died a few days before birth of acute Peritonitis, as evidenced by quantities of coagulable lymph effused upon various parts of the surface of the peritoneum, and more particularly on the surfaces of the spleen and liver. Dr Simpson stated that, 1st, Acute and fatal Peritonitis appear to be a very common inflammatory disease in the fœtus in the latter months of utero-gestation. 2d, A large number of fœtuses dying in the seventh and eighth month of utero-gestation, present, as he had found on dissection, well-marked anatomical evidence of it, in the presence of effusions of coagulable lymph, adhesions between the folds of intestines, pus, &c. 3d, The child is sometimes, though rarely, born alive, and affected with it. 4th, Far more commonly the child is born dead, and the previous history of the mother shows that it had perished from one to three weeks before its expulsion, its movements having ceased about that time. 5th, Before the child's movements entirely cease, the mother very generally remarks that its movements are morbid and excessive for fifty or sixty hours previously—probably during the currency of the fatal disease. 6th, Peritonitis is occasionly apt to recur in successive children in the same mother, and seems in some a result and remnant of the syphilitic poison in the parents. 7th, But in most cases its occurrence is independent of syphilis, and occasionally it will not attack successive children in the same mother, or even both children in cases of twins. In an essay on the disease, published some years ago in the Edinburgh *Medical and Surgical Journal*, Vol. I. p. 392, Dr Simpson had described a case of twins, in which one was born living and healthy ; the other was dead, and within the abdomen were found all the usual appearances following intra-uterine peritonitis. Whilst intra-uterine Peritonitis was very common, intra-uterine Pleuritis was very rare ; Dr Simpson had only seen two well-marked cases of it in the fœtus.

Meeting IV. *March* 12, 1848.—Dr Simpson, President, in the Chair.

ON RUPTURE OF THE UTERUS FROM HYDROCEPHALUS IN THE FŒTUS. BY DR SIMPSON.

Dr Simpson described two cases to which he had recently been called, and in which fatal rupture of the uterus had previously occurred in consequence of hydrocephalus in the fœtus. Both mothers had borne large families without difficulty. In both cases their present labours were very prolonged, and the pains severe before the laceration occurred. And, it might perhaps be laid down as a general principle, that when a mother who had previously borne children with the usual facility and safety, suffered a long and difficult labour, with the head never properly entering the brim, dangerous enlargement of the head from hydrocephalus, or other causes, should be suspected, and the most careful means instituted in order to make out a correct diagnosis. In this, as in other important cases, if the patient were put into an anæsthetic state, great facilities would be given for making a careful and leisurely diagnostic examination of the child's head with the hand, without suffering or resistance on the part of the mother. The unusual size and dimensions of the head might be thus ascertained ; but one source of fallacy was to be guarded against, namely, that the sutures and fontenelles were not, as was usually described, always preternaturally open and enlarged in hydrocephalic cases ; for the cranial bones were in some instances, where the internal effusion was very great, so largely and abnormally developed as to destroy this supposed pathognomonic sign, and form an almost complete osseous covering for the enlarged head. In one of the two cases described by Dr Simpson, the cranial bones were, in this way, as large as in a child two or three years old. When hydrocephalus was attended with imperfect ossification, the enlarged fluid head sometimes moulded itself so readily to the maternal passages as to pass without much difficulty even when of very great size. But the danger and difficulty was much increased when to this was added the impediment arising from enlargement of the bones themselves.

The danger of rupture of the uterus, and consequent death of the mother, was much greater under hydrocephalus than obstetric authors commonly described. In a collection of cases of intra-uterine hydrocephalus made this year by Mr Thomas Keith for his thesis, out of 74 instances of the disease which he had found on record, in 16 the uterus ruptured during labour. In fact, the diseased head of the infant, distended by the effused fluid, acted, under the impressions conveyed to it by the body and spine of the infant during labour, like a hydraulic bag or machine, pressing equally and in all directions on the cervix uteri, or parts with which it was in contact, with a force under which these compressed structures were almost certain to rend, provided the pressure were of any great duration, because the force itself contained the sum and concentration of the whole power of the uterine contractions bearing on each point with which the bag of the head was in contact. Under such compression any weak point, or fissured point, was almost certain to yield. And if any hydrocephalic head or fluid bag of this kind passed into the vagina and remained there, the kind of universal compression of the vaginal walls to which it gave rise, was apt, if it did not lead to direct rending and laceration, to produce, if long continued, sloughing inflammation in these parts.

Hence labours, in which the child's head was hydrocephalic, should not, if possible, be allowed to become prolonged; but it was not perhaps necessary to destroy entirely such an infant during labour by using the crochet or other mortal operative procedure. In some instances it was a matter of legal importance for the parents that the child should be born alive, though not capable of surviving. And a small trocar passed into the hydrocephalic collection was capable of evacuating the contained fluid as efficiently as a more extensive and fatal laceration by the usual obstetric perforator or scissors; nor was such an evacuation by the trocar necessarily fatal to the fœtus, for we know that in the operation for hydrocephalus on the child after birth, by Dr Conquest and others, the simple puncture of the head was by no means a fatal operation. Those operated on seldom or never died of the operation itself, but of the subsequent re-accumulations and consequences.

The hydrocephalic fœtus not unfrequently presents by the feet or breech. In a case of this kind which occurred some time ago to Mr Girdwood of Falkirk, and where the child was dead and putrid, the spine and skin over it lacerated at the neck in making the usual tractions to bring down the head. A great quantity of water escaped from the laceration, and the enlarged head, which had previously resisted the force applied to it, was now easily extracted in its collapsed state. This case afforded a suggestion, that under a similar complication, with the body already born, instead of passing our hand and perforator to the brim of the pelvis in order to puncture the head, which was sometimes a matter of no small difficulty, we might attain the same end, of the evacuation by the hydrocephalic effusion, by the more simple and safe measure of opening the vertebral canal, in any part of the course of the spine.

MEDICATED PESSARIES. BY DR SIMPSON.

In diseased states of the cervix uteri and vagina, medicinal substances had been applied locally to those parts under various forms, but principally, either in a solid state (as nitrate of silver, potassa, &c.), or in a liquid form (as in the great varieties of medicated injections in common use in leucorrhœa, &c.) When thus used, the local application was temporary, and applied for a few minutes only. But in various forms of disease it seemed an indication of no small importance to have the medicated substance applied continuously, and not temporarily. Medicated pessaries, which Dr Simpson had first introduced into practice several years ago, and which had since been extensively adopted by various practitioners in London and elsewhere (see descriptions of them published by Dr Stafford Lee, Dr Oldham, &c.), enabled us to fulfil this indication. By their use, for instance, we could keep the cervix uteri, when ulcerated and indurated, constantly embedded in mercurial or iodine ointment for weeks, and sometimes with the most marked benefit and success. They fulfilled another indication in cases of irritation and inflammation of the mucous membrane of the cervix uteri and vagina. They kept the opposed diseased surfaces from coming in contact, and it was well known how important a matter this was in the pathology of mucous and cutaneous surfaces.

Dr Simpson had been in the habit of applying a variety of substances in the form of medicated pessaries, particularly zinc and lead ointment, &c., as simple emollients; mercury and iodine as discutients (and particularly the iodide of lead); tannin, alum, and catechu, as astringents; opium, belladonna, &c., as anodynes. The pessaries were made of the size of walnuts, and could be easily introduced by the patients themselves; one or two in the twenty-four hours. They were composed of the medicine used, mixed up in the form of an ointment, and brought to a requisite degree of consistence with one or two drachms of yellow wax to the ounce of ointment. Messrs Duncan and Flockhart, druggists, had found the following proportions requisite in the subjoined forms, (those in most frequent use in Edinburgh); and they might serve as models for the others. After being made up in the proper form, they were usually coated by the druggists with a firmer covering, by dipping them into an ointment made up with wax and resin, kept liquid by heat. About an ounce of the different ointments made four balls.

1. *Zinc Pessaries.*—℞ Oxydi Zinci ʒj, Ceræ Albæ ʒj, Axungiæ ʒvj, Misce, et divide in pessos quatuor.

2. *Lead Pessaries* —℞ Acet. Plumbi. ʒss, Ceræ Albæ ℥iss, Axungiæ ʒvj, Misce.

3. *Mercurial Pessaries.*—℞ Unguent. Hydrarg. Fort. ʒij, Ceræ Flavæ ʒij, Axungiæ ℥ss, Misce.

4. *Iodide of Lead Pessaries.*—℞ Iodidi Plumbi. ℈j, Ceræ Flavæ ℈v, Axungiæ ʒvj, Misce.

5. *Tannin Pessaries.*—℞ Tanninæ ℈ij, Ceræ Albæ ℈v, Axungiæ ʒvj, Misce.

6. *Alum and Catechu Pessaries.*—℞ Sulph. Aluminis ʒj, Pulv. Catechu ʒj, Ceræ Flavæ ʒi, Axungiæ ʒvss, Misce.

7. *Belladonna Pessaries.*—℞ Extr. Belladonnæ ℈ij, Ceræ Flavæ ʒiss, Axungiæ ʒvi, Misce.

PLASTER-BELT IN ABDOMINAL TUMOURS, &c. BY DR SIMPSON.

Dr Simpson stated, that patients affected with pediculated ovarian tumours, large fibrous tumours of the uterus, &c., often suffered from the morbid masses being loose and mobile, and impinging on the bladder, &c., in different positions of the body. Patients sometimes instinctively applied their hands to the tumours, under such circumstances, to steady and fix them. In these cases different means had been tried, with the view of preventing the tumours rolling and moving—such as various bandages, air-pads of Mackintosh cloth, &c. The best and simplest means, however, consisted in surrounding the whole trunk with a continuous belt of lambskin or chamois leather, eight or ten inches deep, and shaped and sewed so as carefully and exactly to fit the loins and lower part of the abdomen of the patient, like a common abdominal bandage, and embossed in front so as to contain and include, as in a bowl or cup, the protuberant portion or portions of the tumour. To fix the belt, its interior was spread with a plaster composed of one part of adhesive to two parts of soap plaster. It generally gave the patient much relief; abated the feelings of abdominal weight, and pressure and pain in the back; held the tumour steady; and could be applied so as even to compress it. In other cases where no tumours were present, but the abdominal parietes and contents were relaxed, or the spine weak, the same form of plaster often afforded a great degree of comfort and relief, and enabled patients to take exercise, &c., when, otherwise, they could not without fatigue and suffering. They generally required to be removed and renewed every four or six weeks.

NOMA—RECOVERY FROM, AFTER EXFOLIATION OF THE JAW AND EXTENSIVE SLOUGHING OF THE CHEEK.

Dr Keiller read a communication on *cancrum oris* or *noma*, and related the particulars of several cases, in two of which recovery had taken place after exfoliation and sloughing of considerable portions of the jaw and cheek. One of the successful cases had occurred in the practice of Dr Paton of Dundee, the other was attended by Dr Keiller, when officiating some years ago at the Royal Dispensary. The following is Dr Paton's case, as communicated by himself:—

William Durward, æt. twenty months, born of healthy parents, with no scrofulous taint in either of them, has been always healthy until the above age, when he had an attack of measles, then epidemic, but of so mild a kind that no medical advice was required until a week or two after, when he was brought to me (May 7, 1845) for a troublesome diarrhœa, with apthous sores on the tongue, for which some powders of rhubarb and sulphate of potass, and a solution of nitrate of silver, were prescribed. The mouth got soon well, but the diarrhœa continued, and on the 22d May, a mixture, containing Tinct. of Hyos., Calomba, and Carb. Sod., with powders of rhubarb, aromatic and Dover's powder, with about half a grain of Hydrarg. cum Creta, was given every night for six nights. The discharges became much improved, but with extreme emaciation, and quinine was added to the mixture. From this time to the 7th June I had seen him daily, but he was then so much improved that I did not visit him for two or three days, when his mother directed my attention to his gums, which I found separating from the incisores of the lower jaw, and looking black. I applied the strong muriatic acid freely to the parts, and increased the quantity of quinine, giving a small quantity of port wine, and attending to the bowels and keeping the mouth very clean; in two days the sloughing process had extended to the lower lip, and on the 20th June there was a large hole through the lip; the applications were continued, but the process extended rapidly to the left side, and in a few days involved the whole cheek, when a line of demarcation appeared, and we were in hopes that the gangrene had stopped, but it again commenced, and extended upwards as far as the lower eyelid, and backwards to the angle of the jaw. At this time the case was considered one of a very hopeless nature, indeed recovery was not deemed desirable. Still the tonic treatment was continued, and it was wonderful with what avidity the little patient swallowed and relished his wine, beef-tea, &c. About the 26th June the gangrenous process stopped, and the sloughs began to separate, exposing the whole of the mouth, and leaving the malar bones bare. The granulating process soon filled up the gap, leaving, however, a very unseemly scar, and about the end of August the external surface was entirely healed over, and he continued to improve until a few weeks after, when his mother, observing something white in his mouth, put in her fingers and removed the accompanying large portion of jaw, containing two molar teeth. He is now a fine healthy child, and the deformity is not so great as might have been expected. The only inconvenience he suffers from is the opening of the parotid duct externally, and the consequent escape of the saliva; but this I mean to remedy so soon as he is able to see the benefit of it, and can be controlled during the treatment. A hard substance resembling gum now supplies the place of the exfoliation, there being of course no teeth on that side.

Dr Keiller exhibited the exfoliated portion of the jaw, with teeth, to the Society, and stated, that the case which terminated favourably under his care at the Royal Dispensary, in many respects resembled that of Dr Paton. The child was two years of age, feeble and emaciated, had a large belly, and deranged bowels some time after a mild attack of scarlatina. The breath soon became extremely offensive, and on examining the mouth the upper gum of the left side was found partially detached from the alveolar arch, the ulcerative process having already crept along the edge of the upper, and even extended and implicated that of the lower jaw.

The mucous membrane of the left cheek in a few days assumed a dark colour, and became studded over with greyish spots, which rapidly enlarged, causing copious and very offensive salivation. The application of nitrate of silver and the ordinary washes, which were used at this stage, had no effect in checking the disease; the alveoli were soon laid quite bare by the separation and destruction of the gums, and several of the teeth dropped out; the substance of the cheek gradually became more and more involved, being black and ulcerated internally, and swollen, hard, and of a somewhat pale and shining appearance externally, this palish colour gradually afterwards deepening until it became almost black, when an immense slough commenced to detach itself, and which, on removal, laid the cavity of the mouth on the left side extensively open. The teeth of the upper jaw dropped out, but no part of the bone exfoliated.

The treatment consisted in the application of nitric acid once, and muriatic acid twice, freely to the sloughy mass, and ultimately removing it with forceps and scissors; wine, quinine, and nourishing diet, together with a little nitric acid, being at the same time occasionally administered.

The child throughout seemed to suffer little or no pain, even when the gangrenous erosion was most extensive, and ultimately got quite well, an obvious retraction of the angle of the mouth being the only deformity left.

No *mercurial* preparation was given in the above case, nor in other cases which were referred to by Dr Keiller, who remarked that the occurrence of *noma* ought scarcely to be ever attributed to the incidental use of *a few grains of hydrargyrum cum creta* during the treatment of any of the numerous infantile diseases of which it generally appears as a mere *sequela*, such as measles or the other exanthemata, hooping-cough, dysentery, or other diseases inducing great debility in children of originally delicate constitutions, whose systems, with or without *mercury*, are little able to withstand the continued irritation and debilitating influence of prolonged disease.

Dr Keiller concluded from what he had seen and read of this exceedingly fatal malady (19 out of every 20 attacked by its more severe forms falling victims to its ravages), that the most efficient means of cure consisted in the most tonic and invigorating treatment that could be adopted; wine, quinine, nourishing diet, and nitric acid internally, and the free application of the most powerful acids, or even the actual cautery to the *surfaces subjacent* to the gangrenous sloughs, in order to excite to healthy action the vessels of the diseased and poisonous tissues.

Dr Burn had met with two cases of noma in children. In one, mercury had been given previously, but none in the other. They both did well under a nourishing diet, quinine, and the free local application of nitric acid.

Dr Moir lately met with one fatal case after scarlatina. Dr Lee had seen the disease in a woman who was seized with fever while labouring under scurvy. He had also seen it in a child with hooping-cough. In this case it proved fatal in three days.

Dr Simpson had seen a well-marked case of noma, which came on with no preceding fever, and no mercury had been given previously. The cheek became white and waxy in colour. A small vesicle or two then formed on its surface, at first clear, but soon filled with bloody serum; gangrene and sloughing then followed, and spread rapidly till the child sank.

CASES OF SPONTANEOUS AMPUTATION OF THE FOREARM, AND SUBSEQUENT RUDIMENTARY REGENERATION OF THE HAND IN THE FŒTUS. BY DR SIMPSON.

Dr Simpson showed the society a girl, aged eleven, who had been born wanting the left upper extremity from a short way below the elbow-joint. The arm of this side was of the natural size and form; but the forearm consisted merely of a stump about two inches long. It had all the appearance of having been amputated about the union of its upper and middle third, the surface having subsequently healed over in a very perfect manner. No appearance of cicatrization was visible except over the ends of the two bones, where the skin was puckered and drawn in in an umbilical form. Midway between, and a little in front of these two points, was a raised cutaneous tubercle, divided on the surface into five minute nodules, on two of which small points of nail could be detected. This projection Dr Simpson stated various reasons for believing to indicate an effort of nature to replace the lost portion of the limb,—he considered it to be in fact a rudimentary hand, and a curious illustration of the power of regeneration of even compound parts in the embryo and fœtus in utero.

Dr Simpson showed a great number of casts and drawings of other similar cases. The general resemblance of the cases to each other was very remarkable. In all, the amputation seemed to have happened at precisely the same situation; in all, the cicatricies over the ends of the two bones were well marked; and in all, there was a more or less marked indication of an attempt of reproduction of the lost portion of the member.

Dr Simpson also showed, as an illustration of the mechanism or production of spontaneous amputations, a child born in the Maternity Hospital recently, whose fingers and toes were in several parts semi-amputated by bands of coagulable lymph or false membrane—the result of inflammation of the cutaneous surface of the fœtus. The bands still existed at some points. There were the following deformities:—

In the *right* hand, the second, third, and fourth fingers were joined together laterally, in a somewhat conical mass. The index finger, the longest, ended in a transversely furrowed tuberculated mass. To the index was joined the fourth or ring finger at its apex, and, filling up the triangular interval between them, lay the third finger, having only the remains of one phalanx. The fifth or little finger ended abruptly at about the middle of its length, and had an osseous nodule representing the second phalanx. On its apex is a small crack, and a long dry filament is attached. All the fingers of the *left* hand presented circular constrictions of inconsiderable depth over their first phalanges. In addition, the fourth or ring finger seemed merely to possess a remnant of the second phalanx, and then abruptly terminated in a constricted tubercle. The *right* foot was normally formed. The great toe of the *left* foot was almost entirely absent, being represented merely by some irregular tubercles of skin. The second toe was supplanted by a soft bag of integument. The third and fourth toes had each, in place of their terminal phalanges, two constricted tubercles, without vestige of a nail. The fifth or little toe was well formed.

Meeting V. *May* 10.—Dr Simpson, President, in the Chair.

BIRTH OF A DOUBLE MONSTER. BY DR LYELL.—COMMUNICATED BY PROFESSOR SIMPSON.

Dr Simpson laid before the Society a case of the birth of a double monster, which occurred in the practice of Dr Lyell of Dundee, who had kindly forwarded the infants to him for examination. The monster belonged to Geoffroy St Hilaire's family of *Monomphaliens*, characterised by the union of two almost perfect individuals having a common umbilicus, and was of the genus *Sternopage*, in the same classification. It agreed with St Hilaire's characters of the genus in the junction or fusion of the two fœtuses, extending from immediately below the umbilicus to the apex of the sternum, (Fig. 1); in having a common pericardium (*d*, Fig. 2) containing two distinct and perfect hearts (*b c*, Fig. 2); in having four perfect lungs; but it differed from St Hilaire's generic description in this one particular, that the cavities of the pleuræ were not fused and thrown into one, but remained separated by a double serous layer, composed by the reflexion of the pleuræ. There was a single diaphragm (*k*), and a large liver (*e f*) common to both lying in the mesial line, and over which the two peritoneal coatings were reflected, one over each half, forming also its suspensory ligament in the mesial line above, and the septum between the two abdominal cavities by their union below. From the liver, at both sides of the serous dissepiment of the two peritoneal cavities, issued an umbilical vein—(*m n.*) These, with their corresponding umbilical arteries, converged to form the cord which issued single from the umbilicus, and at a length of about eight inches divided into two stems, each of about two inches long, which were inserted separately into a common and single placenta.

The history of the labour Dr Simpson laid before the Society in the following letter from Dr Lyell, received a few days after the woman's delivery :—

" On the evening of Monday the 2d November 1846, I was called about half-past eight P.M., to attend Mrs A——, in labour with her second child. She had her first child, a boy, twenty months ago; and then her labour was so quick that no doctor was sent for. On my arrival about nine o'clock, I ascertained that she had been ill about three quarters of an hour. On examination, I found the vertex presenting, the os uteri dilated to the size of a crown-piece, and very dilatable. She complained of the pains being strong ; but as they were not at all expulsive, I ruptured the membranes. As this did not mend matters, I exhibited a dose of ergot, but it had no better effect. A hand was felt coming down along the side of the head. From the circumstances of the pains being so strong, and their being no appearance of the head being impacted, I began to suspect there were twins, and that the one child was, in some way, preventing the delivery of the other. I, therefore, thought it would be necessary to give her some assistance with the forceps. At twelve P.M. I proceeded to apply them, and succeeded in effecting the delivery of the head in a few minutes, but I could not make the body descend, and when I stopt pulling, the head was forcibly drawn back against the external parts. I tried pretty strong traction again, and the neck yielded as if the head had partially separated from the body. On throwing aside the bed-clothes, and examining the head, I discovered the presence of harelip and cleft palate in the child, and as it made several convulsive movements, I was anxious to effect the delivery as soon as possible, that its life might be saved. I brought down first one arm and then another, but still could not get away the body. The face looked towards the pubis. At this time I felt a third hand descending, and now there was no doubt of there being a second child. I introduced my right hand for the purpose of changing its position, but found it so wedged, lying across the brim of the pelvis, that its position could not be altered. The lower part of the body of the half-delivered child lay across the loins of the second, and was thus prevented entering the brim. I withdrew the right hand, and, after reflecting for a little, introduced the left hand along the spine of the first child to the nates, and succeeded in dragging its body into the pelvis, but all advance was again stopped. Anticipating the necessity of turning the second child, I seized and dragged its limbs along with the still undelivered limbs of the first child, and at last, after many efforts, succeeded in completing the delivery at half-past twelve P. M., the two infants revolving, as it were, upon their common sternum, around the symphysis pubis of the mother. From the first application of the forceps to the completion of delivery, from twenty to twenty-five minutes elapsed. The first child having the harelip was alive, and lived eighteen hours. The second was born dead. They were of full size (eighteen inches long), and, on the whole, well-formed. The mother made a good recovery. Mrs A—— has since been delivered of a healthy child at the full time."

The case, Dr Simpson observed, was interesting *obstetrically* from the accurate description of the mechanism of the delivery as detailed by Dr Lyell, there being few details yet on record of the mechanism of labour with double

D^r. LYELL'S CASE OF DOUBLE MONSTER.

Fig. 1.

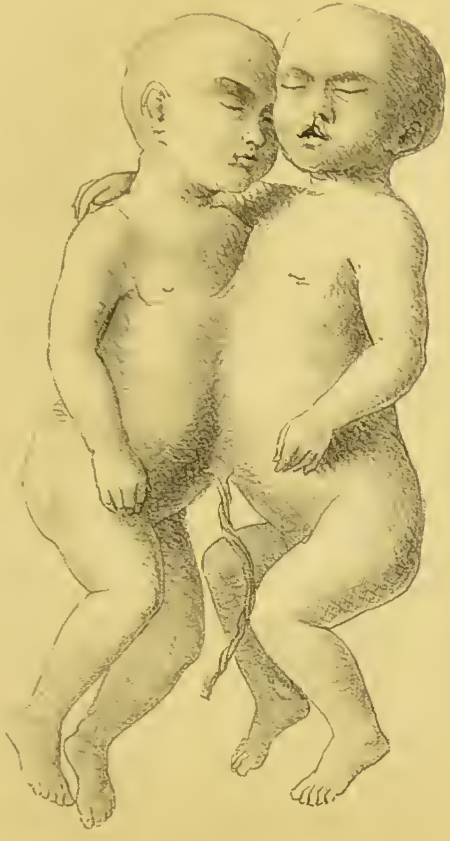


Fig. 2.

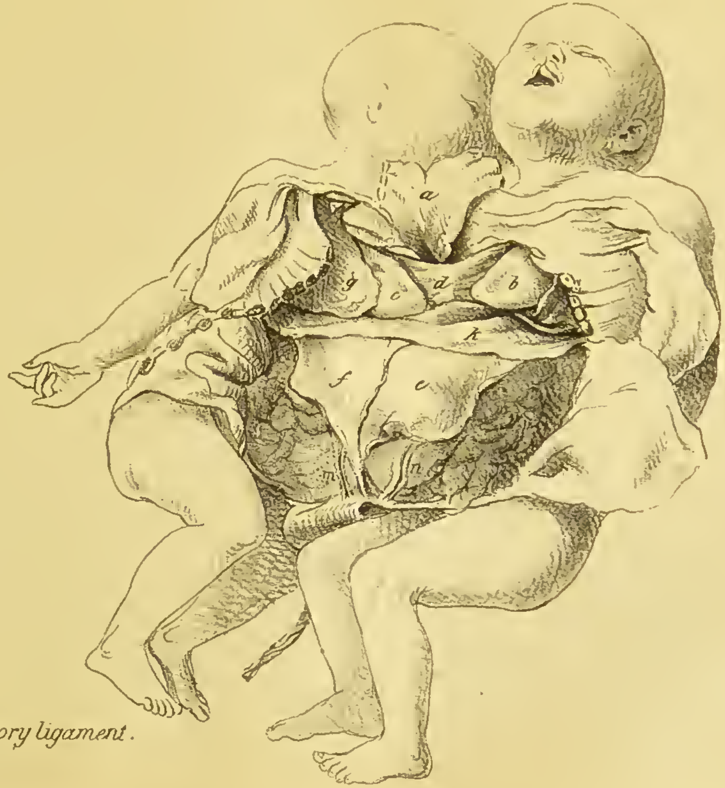


Fig. 2.

a. Sternum reflected.
b. Left Fœtal Heart.
c. Right Fœtal Heart.
d. Common Pericardium.
e.f. Common liver with suspensory ligament.
g. The Lung.
k. Common Diaphragm.
m.n. Umbilical Veins.

ck Lith^r Edinburgh

monstrosity. The practice adopted by Dr Lyell seemed the very best that could possibly have been adopted. The wonder was the frequency with which double monsters were born without almost a mother ever being lost. In most cases, the fœtuses seemed to overlap, and adapt themselves to the inequalities of each other ; and, when turning or extraction by the feet was adopted, it was usually found that pulling by the feet of one body (after all the four were down) was preferable, as it allowed the one body to overlap the other, and the head of the first child, for instance, to be pulled down, and adapted to the neck of the second, thus greatly saving size and space.

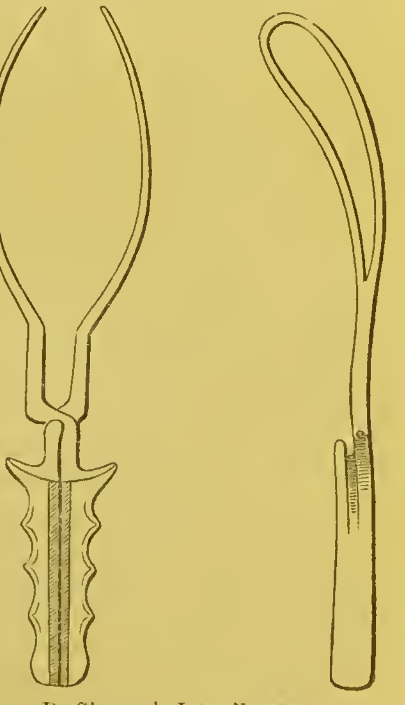
The case was interesting *physiologically*, as it formed, he believed, the first recorded instance of any of the infants in a case of *Sternopage* monstrosity living beyond a few seconds after birth. In general the two hearts are too intimately fused together to allow of the survival of either of the infants after birth.

ON THE MODE OF APPLICATION OF THE LONG FORCEPS. BY PROFESSOR SIMPSON.

When the head of the child becomes fixed in the brim of the pelvis, and the powers of the uterus fail in propelling it through that aperture, one of two modes of instrumental delivery is usually resorted to,—namely, either 1. Diminution of the infant's head by perforation and craniotomy ; or, 2. Extraction of it by the long forceps.

Craniotomy is the preferable operation where the child is dead, and where the pelvic brim is much contracted, or the child's head very much above the average size. But besides being always necessarily fatal to the child, craniotomy is an operation by no means without danger to the mother ;—one in every five mothers (according to Dr Churchill) dying, upon whom it is performed. And in most schools of midwifery, it is now, consequently, much more rarely practised than heretofore. Still many authors and practitioners, as Drs Collins, Johnson, Lee, &c., appear to resort to it in all cases in which the bulk of the head is unable to pass the brim, and reject entirely the other alternative of the long forceps.

The long forceps afford in these cases the best chance of life to the child, and when used with proper views of their mechanism and mode of application, their employment, as is often seen in Edinburgh practice, is by no means so difficult and dangerous as some authorities seem to believe. Misapprehension on these points is perhaps the cause why they are not more frequently used. They differ from the short forceps in some points of construction, but more particularly in regard to their mode of application and working. They differ for example in their length ; in the shanks being parallel for some distance beyond the lock (an indispensable point in order to prevent them injuring the outlet) ; in their blades being curved ; and in the part intended to embrace the head being sufficiently long and large. The instrument which Dr Simpson has frequently and successfully used (See *Woodcut*) during the last five or six years, has some additional peculiarities. The blades are the same as Dr F. Ramsbotham's, but scarcely so much curved. The lock is Smellie's, but with knees or projections above it of such size as to prevent the blades readily unlocking in the intervals between the pains, thus giving it the fixed character of the locks



Dr Simpson's Long Forceps

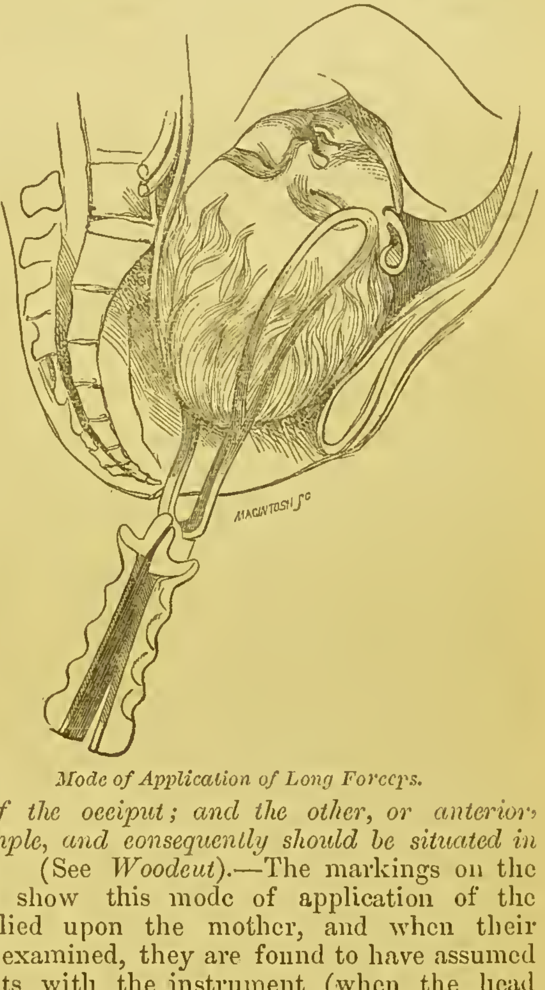
of Levret and Brunninghausen's instruments, without their complexity. The joints are made so loose as to allow of their lateral motion and overlapping to a very considerable degree, thus facilitating their introduction and application. And, lastly, the handle is that used by Naegele and other German accoucheurs, viz. with transverse knees or rests below the lock for one or two of the first fingers of the right hand to drag by, the long forceps being only properly used as an instrument of traction, not of compression. In addition, the handles are grooved and marked on the anterior side, to distinguish that from the other side when the blades are within the pelvis. The following are some of the dimensions of Dr Simpson's forceps:—Length of the entire instrument, $13\frac{3}{4}$ inches; length of handle, including the lock, $5\frac{1}{4}$ inches; length of shank from the lock to the commencement of the curve of the blade, $2\frac{1}{4}$ inches; length of the blade, $6\frac{1}{4}$ inches; extreme breadth of blade at $1\frac{1}{2}$ inch distance from the point of the instrument, $1\frac{3}{4}$ inches; length of the fenestra, $4\frac{1}{2}$ inches; extreme breadth of the fenestra, 13 lines; breadth of the groove of the lock, $\frac{3}{8}$ inch; thickness of the shank to fit in the groove of the lock, $\frac{2}{8}$ inch; extreme distance between the blades at 3 inches distance from the point of the forceps when locked, 3 inches; distance between the points of the two blades when locked, 1 inch.

In their modes of application, the long forceps differ from the short. The short forceps are applied always to the lateral surfaces of the child's head, in whatever position the head may be. Generally, the long diameter of the head lies in the right diagonal diameter of the pelvis; and, consequently, the short forceps are placed in the opposite or left diagonal diameter; or, in other words, at right angles to the long diameter of the head. The mode in which the long forceps ought to be applied, and are really applied in practice, has given rise to considerable difference of opinion.

If the long forceps are ever for inertia, hemorrhage, or other such complications, in any case applied while the head is passing through the brim, and the brim and head are natural in size, the instrument may be perhaps applied, like the short forceps, directly to the lateral surfaces of the child's head. But the common reason for the employment of the long forceps, is morbid contraction of the brim of the pelvis in its most general form, and from its most general cause, viz., in the conjugate or antero-posterior diameter, from projection forward of the promontory of the sacrum. How are the long forceps applied when used in this, the case in which they are most generally had recourse to in practice? It is first requisite to state, that under this complication the child's head is found situated in the brim, with its long or fronto-occipital diameter lying in the transverse diameter of the brim, or with the forehead looking to one ilium, and the occiput looking to the other. In other words, the long diameter of the head is not placed, as usual, in the right diagonal diameter of the brim, but more in its transverse; for where the promontory of the sacrum forms a morbid projection, the transverse forms the longest diameter of the brim, and, consequently, the one in which the child's head comes to be placed by the uterine efforts. The face or forehead looking to the ilium, and the occiput to the other ilium, the lateral surfaces of the child's head come to be compressed between the protruding sacral promontory and the interior of the symphysis pubis. Now, in seizing the head in this case, some authors aver, that,

1*st*, *The blades of the long forceps are placed, as in applying the short forceps, on the lateral or aural surfaces of the child's head,* and consequently with one blade in front of the sacral promontory, and the other behind the symphysis pubis. Burns, Dewees, &c., speak thus of applying the long forceps in the conjugate diameter of the brim; and Dr Churchill has published a woodcut representing this as the actual method of their application in practice. But its application in this position is impossible in the very cases in which the long forceps are generally required, viz., where the conjugate diameter is contracted, for there is not room for the additional thickness of the blades of the instrument; if applied, they add to the thickness of the head in that one diameter and place in which it is already too thick and large; their pressure would greatly endanger the urethra and bladder in front, and the soft structures placed over the promontory of the sacrum behind; and they could not thus be placed in the axis of the brim in consequence of the pressure of the perineum upon the instrument below. Other authors aver, that,

2. *The blades of the long forceps should be placed over the occiput and forehead or face of the child, and consequently in the transverse diameter of the brim.* This is the view of their mode of application taken by Deleurye, Davis, &c. &c., and approaches much nearer the reality than the former opinion; but that it is not strictly true, is shown by the marking of the place of application of the blades of the instrument after the child is born, and by a more attentive consideration of the mechanism of such labours. One blade is found to have been placed behind one ear, and the point of the other to have pressed upon the side of the forehead, temple, or region of the eye; but these would not be the places of the markings of the blades if they were applied in the transverse diameter, upon a head placed directly transverse. Dr Ramsbotham has published a beautiful plate of the mode of application of the long forceps, and has given an excellent chapter on the subject in his work on midwifery. He correctly represents in the plate the anterior blade as placed upon the side of the forehead and eye-brow; but in order to give this view with the forceps placed in the transverse diameter of the brim, he has been obliged to represent the face as turned backwards, whilst in reality, in morbid contractions of the conjugate diameter of the brim, it is actually turned laterally; and he places the long diameter of the blades of the forceps so as to traverse the right oblique instead of the left oblique pelvic diameter.



Mode of Application of Long Forceps.

3. *The blades of the long forceps should, I believe, be placed obliquely upon the child's head,—one, the posterior, over the side of the occiput; and the other, or anterior, over the side of the brow or temple, and consequently should be situated in the oblique diameter of the brim.* (See *Woodcut*).—The markings on the child's head after birth always show this mode of application of the instrument: when properly applied upon the mother, and when their situation relative to the pelvis is examined, they are found to have assumed this position; and in experiments with the instrument (when the head of a dead child is fixed in a pelvis with a contracted brim), this is the position and relation which the instrument will be seen to assume with relation to the infantile head and maternal pelvis. Besides, in thus placing the instrument, while we incur less danger of injuring the urethra and other important parts, we place the blades of the instrument in exactly those parts of the pelvic circle where there is least pressure, and consequently most room for them. It is apparently in consequence of misconception on this point, that some authors have come to prefer the use of the perforator to that of the long forceps. Dr Collins, for example, argues that when

the head is detained in the pelvic brim, the brim "measuring little more than three inches from pubis to sacrum," there cannot possibly be space for the long forceps even were the bones denuded, seeing that the blades of the smallest sized forceps used in Britain, even when completely closed, measure from $3\frac{1}{8}$ inches to $3\frac{1}{2}$." "How (he adds) is it possible with the forceps to drag a child through a pelvis where there is not space, except by force, to introduce, as is commonly said, a straw, or where the smallest flexible catheter cannot be passed in some instances into the bladder?" These and such opinions proceed on the erroneous idea, that the long forceps are to be applied, within the pelvis, at the parts or in the diameter in which the pelvis is *most* contracted, and they suppose that the head when fixed in the pelvic brim fills completely the *whole* circle of the brim. The usual shape of the morbidly contracted pelvic brim is cordate, or rather elliptico-cordate, but the child's head is not of this shape; it is ovoid, and consequently when applied to the cordate brim leaves unoccupied spaces. The most unoccupied spaces before and behind are at the extremities of the oblique diameters of the brim, where sufficient room is left for the passage of the blades of the forceps, and in these points they are passed when properly applied.

[The preceding observations were illustrated by various experiments with the forceps, and by showing its mode of application upon a dead child's head placed in a contracted pelvis. A number of cases illustrative of the use of the long forceps were mentioned by Dr Simpson, Dr Moir, and other members; and the cases in which turning was preferable pointed out.]

CHLOROFORM IN A CASE OF PUERPERAL CONVULSIONS. BY DR CUMMING.

Dr Cumming related a case of puerperal convulsions coming on after delivery. The patient was a young girl, seventeen years of age, who had been seduced; but, during her short residence in the Maternity hospital, had not been observed to be peculiarly depressed in spirits, or otherwise affected in mind. The labour, all circumstances considered, was unusually short and easy; all the three stages having been completed in six hours. She was delivered at four A.M. At nine A.M. the first convulsion occurred. Venesection was attempted by the house-surgeon; but, in consequence of the resistance and convulsive struggles of the patient, unsuccessfully; the other usual remedial measures, however, were put in operation. I saw her about one o'clock, along with Dr Ziegler and others. She was then with considerable difficulty bled at the arm to sixteen ounces, and as much more was taken away from between the shoulders by cupping; the other remedial measures were also persevered in so as to affect the pulse and general hyperemic condition very decidedly, but with no improvement in the convulsive seizures, which recurred at frequent intervals. During the intervals she was occasionally sensible, so far at least as to indicate that she understood what was said to her. Professor Simpson saw her in the evening, and recommended further depletion by cupping, which was done, but without any effect in rendering the convulsions less frequent or less severe. It was then suggested that chloroform should be administered. The effect of its application was speedy and decided. Though she survived six days, every effort on the part of the system to throw itself into convulsion was checked with ease; so that nature was not so soon exhausted as it would otherwise have been, and other remedies could be applied. It should also be mentioned that the interval of most perfect consciousness was after the chloroform had been applied for some time. Appearances were at this time so favourable as to encourage the hope that she would struggle through. Dr Cumming in conclusion remarked, that, though the issue of the case was unfortunate, nothing could be more satisfactorily established than the power of the chloroform to subdue convulsions, and thus, even when it did not (as in other reported cases it appears to have done) exercise a direct beneficial influence over the disease itself, it prevented the excitement and consequent exhaustion of the system, and admitted of the application and administration of such measures as the case otherwise indicated.

Dr Thatcher stated that he had observed that patients who, when not pregnant, were liable to epilepsy, were frequently the subjects of puerperal convulsions when in labour.

Dr Simpson had on a previous occasion attempted to show that one of the most common predisposing causes of puerperal convulsions was albuminuria, or rather some morbid state of the blood dependent upon albuminuria,—a doctrine which he had taught for the last seven or eight years (see *Monthly Journal* for 1843, foot-note p. 1015), and which Dr Lever had studied and successfully illustrated. He believed this diseased condition of the blood to produce a preternatural excess of irritability or polarity of the nervous system, and more especially of the spinal system of nerves; and in this way a morbid predisposition in it to convulsions under forms and degrees, irritation in the uterus, or bladder, or intestinal canal, &c., that would be incapable of producing this convulsive effect were not the polarity of the nervous system for the time being highly exaggerated. Dr Todd of London had shown last year, that, when the polarity of the nervous system was exaggerated in the lower animals by the exhibition of strychnia, the convulsive tendencies resulting from the strychnia could be so far subdued and decreased by making the animals inhale ether. The ether reduced the excessive polarity and consequent convulsions. And the application of chloroform, in the same way in puerperal convulsions, had been tried with success by Dr Wilson of Glasgow, Mr Fearn, Clifton, &c. Dr Simpson had suggested that the organic conditions of the kidneys causing albuminuria, and predisposing to convulsion in puerperal women, was probably often one of *Stearosis*, produced by the previous circulation of the butyraceous or fatty principles of the milk in the mother's blood before delivery. In the present case, one portion of the kidney after death distinctly presented the stearoid or fatty degeneration.

Dr Peddie read a paper " on the mammary secretion; its character, chemical and structural; the value of the microscope in the study of it; its existence an important sign of early pregnancy; and its pathological changes; with hints regarding lactation and the choice of nurses."—[Dr Peddie's paper appeared at length in last No. of the *Monthly Journal.*]

MEETING VI. June 14.—DR MOIR, Vice-President, in the Chair.

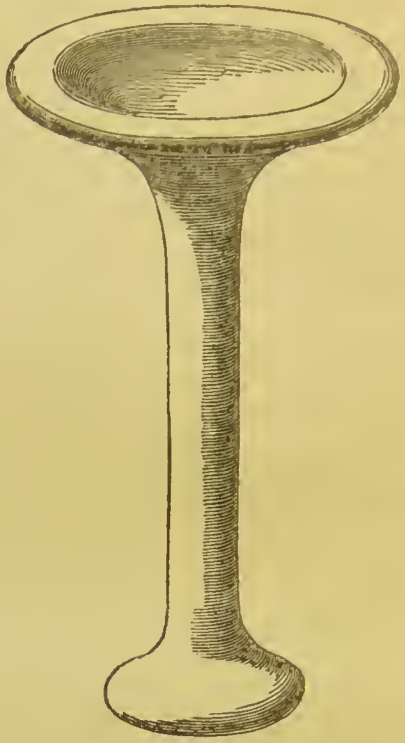
CASES OF PROLONGED LACTATION.

Dr Moir mentioned the case of a married lady, who, from certain reasons, was unable to nurse her children, but in whom the secretion of milk was after each confinement unusually protracted, notwithstanding the means used to discuss it. Starvation, purgatives, diuretics, diaphoretics, and alteratives, as internal remedies, and local astringents of various kinds were used, without in the least diminishing the secretion, or having any effect further than that of weakening the patient; so that latterly the only means employed were of a tonic nature, to sustain her strength. The secretion continued from one confinement till about the third month of the succeeding pregnancy, after which it almost ceased; after her second confinement it continued eighteen months; after her third, twenty-four months; after the fourth, twenty-five months; after the fifth, about twenty-four months, when she had a miscarriage, and since then has had no children. A circumstance that rendered this case peculiarly distressing was, that after her first confinement she suffered from a severe mammary abscess, which, by the practitioner then in attendance, was opened close to the nipple. From this wound the milk continually flowed, and as it never healed up, it was impossible to receive the milk from this breast into any convenient reservoir; so that the lady was kept in a constant state of discomfort, her dress, notwithstanding the use of oiled silk and M'Intosh cloth, being completely saturated with milk. The skin over the abdomen and left side was from the same cause much irritated, and in warm weather partially excoriated.

Dr Peddie knew of a woman having nursed uninterruptedly for three years.

NEW FORM OF PESSARY.

Dr Weir exhibited a pessary for prolapsus of the uterus, which he considered useful from its cheapness, its lightness, and the facility of its introduction and retention. It was composed of a slender stem of light wood, from two to three inches in length, surmounted by a shallow cup (see *Figure*), on which the cervix of the uterus rested. The lower end of the stem was furnished with a small knob or button, which, when the instrument was *in situ*, rested on a simple T bandage. This form of pessary had been used for some years by Dr Weir, and by many others, with the best results.



Dr Weir's Pessary for Prolapsus Uteri.

CASE OF PLACENTA PRÆVIA TERMINATING FAVOURABLY TO THE MOTHER AFTER RUPTURE OF THE MEMBRANES. BY DR E. SKAE.

The subject of the case was a Mrs Orr, the wife of a mechanic, and it took place in her third confinement. In her two previous labours, the presentations were preternatural: in the first the breech presented, and in the second the feet. On both occasions, her delivery was successfully accomplished. At these labours, as well as the one under consideration, she had the assistance of a midwife, who afterwards called me in to complete them. She sent for me on the 26th November 1841, in consequence of a sudden and rather alarming attack of flooding, unattended by pain. She stated to me that she expected confinement in the course of a fortnight; that she had been once or twice threatened with flooding during the two or three weeks preceding. On examining the os uteri I found no indication of impending labour, and the hemorrhage had ceased before my arrival. I enjoined absolute rest, and prescribed repeated doses of opium with acetate of lead. The following day she felt quite well, and on the third day I found her moving about, and stating that she felt perfectly well. On the morning of the 3d of December, five days after, I received an urgent call to visit her without delay. I found, on my arrival, that the midwife had been with her for upwards of two hours. Before making any examination, I was informed by this attendant, that, during the time just mentioned, and for some time previously, there had been considerable flooding, that the os uteri was considerably dilated, but that it was occupied by a soft mass, which she had latterly endeavoured to pull away, believing it to be a false conception, but that she had speedily desisted in her efforts to do so, in consequence of increased flooding; that she had kept the passage plugged, and had recently administered the ergot of rye. On withdrawing the stuffing which had been introduced into the vagina, and some coagulated blood, I discovered the upper part of the passage occupied by the placenta, a portion of it projecting considerably into the vagina, and somewhat lacerated, the result, no doubt, of the midwife's interference. On carrying my fingers round this mass, I found the uterine aperture well dilated, but its whole area occupied by the placenta. I could readily perceive, after careful tactile examination, that although the whole circumference of the opening was filled by the placental mass, prior to the accession of labour, its centre must have been implanted not exactly over the os uteri, but rather posteriorly; for by carrying my finger between it and the cervix anteriorly, to the extent of an inch or more, I could reach the membranes, or what I supposed to be them. I saw no alternative but to follow the only steps at that time sanctioned in obstetric practice, viz. to perforate the membranes, if they could be reached, and deliver by turning, should the nature of the presentation require it. After carrying my hand into the vagina, I passed two fingers carefully upwards and forwards, between the placenta and the cervix anteriorly, until I felt satisfied that I was touching the membranes, these I perforated, but had no sooner done so than a gush of liquor amnii was followed by the immediate and forcible descent of the fœtal head into the brim of the pelvis, and, by the continued and energetic contractions of the uterus, it speedily engaged in its cavity, the placenta being thrust backwards against the sacrum. Within ten minutes after the membranes were ruptured, a dead fœtus was expelled, and the placenta almost immediately followed. There was no subsequent hemorrhage, and the recovery was uninterrupted by a single unfavourable symptom.

Meeting VII.—*Wednesday, 12th July* 1848.—Dr Simpson, President, in the Chair.

REPORT OF THE EDINBURGH ROYAL MATERNITY HOSPITAL, ST JOHN'S STREET.

BY PROFESSOR SIMPSON.

The Edinburgh Maternity Hospital was opened in St John's Street in May 1844, and continued in this locality till May 1846, when the Charity was removed to its present premises in Milton House, Canongate. The following Report comprehends an analysis of the obstetric practice of the Institution during the two years in which it was located in St John Street. The Report was drawn up and communicated to the Medico-Chirurgical Society twelve or eighteen months ago; and its publication was for a time postponed, under the hope that I might find leisure to render it still more minute and extensive. As, however, I have little prospect of fulfilling that wish, I now publish it, with the permission of the Obstetric Society, in the printed account of their transactions. And, I trust, that the continuation of the Reports of the Institution will, betimes, be drawn up and communicated to the Society by some of the younger and more active medical officers attached to the hospital.

At the time the hospital was opened, the directors appointed to it the following medical staff:—Drs Campbell and Beilby, consulting physicians; Dr Pagan, consulting surgeon; Drs Moir and Simpson, ordinary physicians; Dr Ziegler, ordinary surgeon; and Drs Bell, Thomson, Niven, and Carmichael, assistant medical officers. One or two advanced pupils were appointed to live in the house as resident house-surgeons.

I. *The Number of Cases.*—Of women delivered in hospital, there were 374. Of women delivered at their own homes in various parts of the town, there were 1101; making a total of 1475 women delivered under the superintendence of the Institution. Among these are included 58 cases of miscarriage or premature labour.

II. *The Ages of the Women.*—In 1457 of the cases, the ages of the women were noted. In 18 cases the ascertaining of this point was omitted. The following table exhibits, in detail, the number of patients delivered, with their respective ages:—

Ages of the Women.	Number of Women.	Ages of the Women.	Number of Women.
16	4	33	47
17	10	34	40
18	30	35	49
19	57	36	46
20	64	37	23
21	75	38	33
22	101	39	18
23	90	40	37
24	84	41	8
25	77	42	11
26	107	43	9
27	69	44	6
28	94	45	2
29	69	46	2
30	107	47	1
31	34	48	1
32	52		
Total	...	... ...	... 1457

III. *The Quickening.*—The average period of quickening, as calculated from the intern cases where it was noted, was 183 days after the disappearance of the last catamenia.

IV. *The Duration of Pregnancy.*—In the intern cases where the data are afforded, the average duration of pregnancy, calculating from the end of the last catamenia, was 273 days. But on the preceding computation little confidence can be placed, considering the class of patients from which the data are drawn.

V. *The Number of the Pregnancy.*—In 1459 cases, the number of the pregnancy is stated, namely, whether it is the first, second, or third time, &c., the woman has been pregnant; in 16 cases it is omitted. 398 women were delivered of their first children; and thus the frequency of first deliveries was to that of all subsequent deliveries in the proportion of about 1 to 4. The following table exhibits at length the number of cases, with the corresponding number of the pregnancy in each.

Number of the Pregnancy.	Number of Women.	Number of the Pregnancy.	Number of Women.
1	398	10	38
2	294	11	24
3	161	12	11
4	158	13	7
5	116	14	2
6	88	15	1
7	65	16	1
8	57	17	1
9	36	20	1
Total	...	... ...	... 1459

VI. *The Number of Children.*—The children resulting from the 1417 labours, at or near the full time, were 1436 in number. Of these there were born

In single births . . .	1399 children
... twin births . . .	34 ...
... triplet birth . . .	3 ...
Total . . .	1436

VII. *The Sex and State of the Children.*—The children are further to be distributed as follows :—

Sex of the Child.	Number of Children.	Number Born Alive.	Number Born Dead.	Proportion of Still-births.
Male . .	739	682	57 or	1 in every 13
Female .	693	650	43 or	1 in every 16
Sex not stated	4	3	1	... ...
Total .	1436	1335	101	1 in every 14

Excluding from the above list of still-born children 37 which were putrid, there remain 64 whose death was recent. Of these 64, there were born

Under cranial presentations	40
... breech presentations	8
... footling presentations	4
... arm presentation	1
... shoulder presentation	1
... presentation or prolapse of the cord . .	8
... placentar presentation	1
Presentation not stated	1
Total	64

In one of the cases of still-birth under cranial presentation, the mother had convulsions during labour ; and, in another, the child was a male twin ; in a third, the cord was twisted twice around the neck ; in a fourth, the child exhibited marks of abdominal disease ; and in a fifth, the delivery was completed by perforation. Six of the dead children were born in labours complicated with hemorrhage during or before labour.

Of the 37 children born putrid, 18 were male and 19 female infants ; and the presentations were as follows :—

The head presented in	26 cases.
... breech ...	6 ...
... feet ...	1 ...
... shoulder ...	1 ...
Presentation not stated in	3 ...
Total . .	37 ...

During pregnancy two of the mothers whose children were born putrid, laboured under syphilitic complaints ; and a third was affected with ascites and anasarca. In several of the still-born children which I took the opportunity of examining along with the pupils, effusion of coagulable lymph (the consequence of extensive inflammation) was found covering various parts of the peritoneal membrane.

VIII. *The Length of the Children.*—The extreme length or height of the child at birth is stated in 330 cases of single birth completed in the hospital. 169 of these children were male and 161 female.

Of the male children there measured in length—

Under 15 inches,	1 child	Under 20 inches,	53 children
... 16 ...	1 ...	... 21 ...	28 ...
... 17 ...	3 children	... 22 ...	21 ...
... 18 ...	14 ...	... 23 ...	3 ...
... 19 ...	45 ...		
Total			169

Of the female children there measured in length—

Under 15 inches,	1 child	Under 20 inches,	40 children
... 16 ...	1 ...	... 21 ...	32 ...
... 17 ...	1 ...	... 22 ...	13 ...
... 18 ...	10 children	... 23 ...	2 ...
... 19 ...	60 ...	... 24 ...	1 child
Total			161

Average length of male child 19½ inches
... female child 18¾ ...
... both sexes 19⅓ ...

IX. *The Weight of the Children*—The following table gives in detail the respective weights of 337 children delivered within the hospital, including 171 males and 166 females. The children born in plural births are excluded from the table.

Of the male children there were :—

Under 4 lbs.,	4 children.	Under 8 lbs.,	60 children.
... 5 ...	7 ...	... 9 ...	31 ...
... 6 ...	17 ...	... 10 ...	3 ...
... 7 ...	45 ...	... 11 ...	4 ...
Total			171 ...

Of the female children there were :—

Under 4 lbs.,	2 children.	Under 8 lbs.,	50 children.
... 5 ...	4 ...	... 9 ...	27 ...
... 6 ...	17 ...	... 10 ...	7 ...
... 7 ...	59 ...		
Total			166 ...

The lightest child (premature?), a male, 3 lbs. 4 oz. in weight.
The heaviest child, a male, 10 lbs. 8 oz. ditto.
The heaviest female child, 9 lbs. 7 oz. ditto.
The average male child, 7 lbs. 3 drs. ditto.
The average female child, 6 lbs. 10 oz. 11 drs. ditto.
The average of both sexes, 6 lbs. 13 oz. 7 drs. ditto.

X. *The Length of the Umbilical Cord.*—In 327 cases of children delivered within the hospital, the length of the cord was noted. Among these—

The shortest cord measured	12	inches in length.
The longest ditto	43	ditto.
The average ditto	23½	ditto.

In a note attached to the details of an extern case the cord is stated to have been 50 inches long.

XI. *Weight of the Placenta.*—In 325 of the cases delivered within the hospital, the weight of the placenta is noted.

The lightest placenta weighed 7 oz. Premature child?
The heaviest ditto, 2 lbs. 15 oz. The single placenta of twin children.
The average ditto, 1 lb. 4 oz. 14 drs.

XII. *The Duration of Labour.*—The duration of labour from the first commencement of pains was ascertained in 311 cases, all delivered within the hospital. The following table exhibits the average length of the whole labour, and of the first, second, and third stages separately in these 311 cases :—

Average duration of first stage of labour, 11 hours 50 minutes.
Ditto ditto second ditto 1 „ 37 „
Ditto ditto third ditto 0 „ 38 „
Ditto ditto whole labour 12 „ 57 „

The following table exhibits in detail the duration of the whole labour, and of each stage of labour respectively, in all the cases. It reads thus :—The whole labour was completed in 1 hour in 4 cases ; in 2 hours in 4 cases ; and so on. The first stage of labour was completed in 1 hour in 3 cases ; in 35 hours in 5 cases, &c.

Duration in Hours.	Whole Labour.	First Stage.	Second Stage.
1	4	3	161
2	4	9	65
3	7	11	20
4	16	20	16
5	17	26	10
6	16	17	2
7	28	18	4
8	21	18	1
9	17	16	2
10	20	16	1
11	20	15	4
12	12	16	0
13	23	9	0
14	14	9	1
15	8	5	0
16	6	6	0
17	6	3	0
18	8	5	0
19	10	6	0
20	3	7	0
25	22	14	1
30	12	8	0
35	5	5	0
Above 36	14	9	0
Duration not stated......	61	85	103

The third stage was completed in 5 minutes in . . 40 cases.
Ditto ... ... 10 ... . . 88 ...
Ditto ... ... 15 ... . . 80 ...
Ditto ... ... 30 ... . . 104 ...
Ditto ... ... 1 hour . . 16 ...

Third stage completed within 1 hour in . . . 328 ...
Ditto ... ... 1½ ... . . . 7 ...
Ditto ... ... 2 ... . . . 1 ...
Duration not stated in . . . . 38 ...

XIII. *The Modes in which the Children presented.*—In 1421 of the births the presentation of the child is given. The following table exhibits in detail the various presentations, and the number of each respectively in 1421 cases :—

Presentation.	Number of Cases.
Head	1333
A hand descending with the head	31
Both hands descending with the head	1
Face	6
Shoulder	3
Arm	3
Breech	27
Breech and feet	2
One or both feet	15
	1421

The cord presented along with some part of the fœtus in 5 cases.

The cord became prolapsed in 13 cases.

The placenta presented partially along with some part of the infant in 3 cases.

In the preceding table of presentations I have entirely omitted to classify those of the cranium, according to the different positions in which the head may present; because I do not place much reliance upon the perfect accuracy of the reports of positions entered in the hospital records by the younger pupils. In fact, one of their principal objects in hospital and dispensary instruction is to acquire, among other things, a practical knowledge of the somewhat difficult subject of positions. But I have great pleasure and confidence in citing the notes on this subject of Dr Martin Barry, who acted for sixteen months as house-surgeon to the hospital, more especially as the data which he has obtained entirely coincide and agree with the results of my own observations. Dr Barry himself carefully observed and noted the position of the head in 335 cases of cranial presentation, among the patients of the Institution. I shall classify these 335 cases according to the four positions and numerical nomenclature used by many of the German schools :—

I. Occipito-anterior Positions.	
1. Position ; or occiput directed to left foramen ovale,	in 256 cases.
2. Position ; or occiput directed to right foramen ovale,	... 1 ...
II. Occipito-posterior Positions.	
3. Position ; or occiput directed to right sacro-iliac synchondrosis	... 76 ...
4. Position ; or occiput directed to left sacro-iliac synchondrosis	... 2 ...
Total	335 ...

In the cases of occipito-anterior position the head was invariably found to descend and emerge, without any change or movement from the same oblique diameter of the pelvis as it was originally placed in, with one exception. In this solitary case the head rotated from the first into the fourth position, in which it was born.

Out of 78 cases of occipito-posterior position carefully watched, in 75 the occiput turned forwards, and emerged first from under the arch of the pubis. In 2 cases of the third position the occiput continued directed backwards, and the child was expelled without the usual rotation into the first position. Thus the exceptions to the rotation did not occur oftener than about once in thirty cases.

Of the two cases which presented in the fourth position, in one the rotation was performed into the first position. In the other, the head continued to maintain the same position till it was born.

XIV. *The Plural Births.*—Among the 1417 women delivered, 17 or 1 in every 83 gave birth to twin children, and in one case triplets were born.

In the *twin cases* the presentations and state of the children were as shown in the following table :—

Presentation.	Number of Cases.	Number of Children Born Alive.	Number of Children Born Dead.
Double cranial presentation .	8	13	3
1st child, head ; 2d child, breech	6	11	1
1st child, feet ; 2d child, head .	1	2	
1 child, arm ; other not stated .	1	2	
1 child, head ; other not stated	1	2	
Total . .	17 cases or 34 children	30	4

The sexes of the twin children were as follows :—

	In 3 cases, both children male . .	6
	... 5 cases, ... female . .	10
	... 9 cases 1 child male and 1 female .	18
Total	17	34

The average weight of the twin child was 6 lbs. 1 oz.

In the *triplet* case, two of the children presented the head, the third presented the feet. Two of the children were male, one female. All were born alive and vigorous, but, before leaving the hospital, one of the children was accidentally overlaid by its mother. The male children weighed respectively, 5 lbs. 11 oz. and 5 lbs. 2 oz. ; the female child weighed only 3 lbs. 12 oz. The labour was 8½ hours in duration.

XV. *The Mode of Delivery.*—Deducting the abortions and miscarriages, which amounted in number to 58, there remain 1417 cases of delivery about the full time. The following table shows the modes of delivery in these 1417 cases, and their relative frequency to each other. Among those naturally delivered is included a case of spontaneous cephalic evolution or expulsion :—

Mode of Delivery.	Number of Cases.	Proportion.
Naturally	1404	1404 in 1417
Artificially	13	1 ... 107
Mode of Artificial Delivery.		
Traction of presenting feet . . .	1	1 in 1417
Bringing down a foot (breech presentation)	1	1 ... 1417
Turning	6	1 ... 236
Forceps	3	1 ... 472
Crotchet	1	1 ... 1417
Induction of premature labour . .	1	1 ... 1417

Turning was adopted in five cases for preternatural presentations, and in one case for the purpose of hastening delivery under an attack of apoplectic convulsions. The breech presentation, in which a foot was brought down, was a case in which the presenting part did not pass the brim, notwithstanding strong and powerful pains of upwards of a day's duration.

XVI. *The Complicated Labours.*—The following table contains a list of the chief complications observed in the 1417 labours, with the respective numbers and proportion of each:—

Hemorrhage from partial placenta prævia, in	3 cases, or	1	in every	472 cases
———— before labour,	12	1		118
———— during labour,	4	1		354
———— between the expulsion of the child and of the placenta,	16	1		87
———— post partum,	24	1		59
———— (indefinitely stated),	8	1		177
Total of cases of hemorrhage,[1]	67	1		21
Convulsions during labour,	4	1		354
Prolapsus of the entire uterus to the outlet,	2	1		708
Rigidity of the os uteri,	11	1		128
Carcinoma of the os uteri,	1	1		1417
Prolapsus of the anterior lip of the uterus,	6	1		236
Expulsion of the entire ovum (membranes unbroken),	1	1		1417
Prolapsus of the cord,	18	1		79
Cord once or twice around the child's neck, in	158	1		9
—— three times around the child's neck,	4	1		354
—— four times do. do. do.	2	1		708
—— encircling the neck and one hand,	1	1		1417
—— around the neck and arm,	4	1		354
—— around the neck and body,	2	1		708
—— around the shoulder,	2	1		708
—— around the body,	2	1		708
—— around the arm,	1	1		1417
—— around the leg,	2	1		708
—— snapped across before delivery (12 inches long),	1	1		1417
Amaurosis and delirium before delivery,	1	1		1417
Gangrenous slough from the interior of the rectum,	2	1		708

XVII. *The Instrumental Deliveries.*—Instruments were had recourse to in very few cases. The following table exhibits the number and proportion of the deliveries in the 1417 labours:—

Instrumental delivery, in	4 cases,	or 1	in every	354 cases
Viz. Delivery by the forceps,	3	1		472
Delivery by the crotchet,	1	1		1417

Of the four mothers, one died eight days after delivery from puerperal fever. She had been in labour upwards of two days, and was ultimately delivered of a dead child by the short forceps. Of the children extracted by the forceps, two were still-born. In both cases the head had descended into the pelvis before the instruments were applied. In one of these two cases the hospital record states, that, from the state of the cord, the child appeared to have been dead for some time before delivery. It was born after above two days' labour. In the second case the woman had been upwards of twenty-four hours in labour. Convulsions came on an hour and a half before delivery, and returned several times. The child was of very large size, weighing 10 lbs. 2½ oz.

Delivery by the crotchet was resorted to, in consequence of the head of the child being arrested at the brim of a distorted pelvis.

The proportion of cases in which instrumental delivery was had recourse to in the Edinburgh Hospital, was smaller than in most other Obstetric Institutions. The following table will perhaps illustrate this point more fully than any more lengthened remarks. The first column of figures shows the absolute number of labour cases reported by the different practitioners named; the second column shows the proportion of instances in each of the returns in which the practitioner resorted to delivery by instruments; and the third and fourth columns respectively show the comparative proportion in which the two modes of instrumental delivery (the forceps and crotchet) were employed by each practitioner. It will be seen how frequently the forceps were employed by some in comparison with craniotomy; how frequently craniotomy was employed by others in comparison with the forceps; and how very different the proportion of cases supposed to require instrumental delivery at all, is in the practices of different medical schools and institutions.

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[1] In the Hospital books "hemorrhage" is frequently noted when there was a more than usual loss of blood, although it may have been in comparatively small quantity.

Table showing the Proportion of Instrumental Deliveries, and of Deliveries by the Forceps and by Craniotomy in different Obstetric Institutions.

Name of Reporter.	Total Number of Labours Reported.	Proportion of Instrumental Deliveries.	Proportion of Deliveries by Forceps.	Proportion of Deliveries by Craniotomy.
Siebold—Berlin	2093	1 in 7	1 in 7	1 in 2093
Busch—Berlin	2056	1 ... 11	1 ... 12	1 ... 342
Carus—Dresden	2549	1 ... 13	1 ... 14	1 ... 283
Nægele—Heidelberg	1711	1 ... 31	1 ... 31	1 ... 1711
Bland—Westminster	1897	1 ... 95	1 ... 158	1 ... 237
Beatty—Dublin	1182	1 ... 98	1 ... 131	1 ... 394
Collins—Dublin	16,654	1 ... 115	1 ... 617	1 ... 141
Churchill—Dublin	1640	1 ... 117	1 ... 546	1 ... 149
Lever—London	4666	1 ... 137	1 ... 518	1 ... 186
Boer—Vienna	9589	1 ... 199	1 ... 274	1 ... 737
Lachapelle—Paris	22,243	1 ... 252	1 ... 293	1 ... 1854
Ramsbotham—London	48,682	1 ... 322	1 ... 553	1 ... 773
Simpson—Edinburgh	1417	1 ... 354	1 ... 472	1 ... 1417

XVIII. *The Maternal Deaths.*—Among the 1475 women delivered under the superintendence of the Institution, eleven deaths occurred, or one in 134. Of these, seven occurred among the cases delivered in the hospital, and four among the out cases.

Four of these eleven patients were in their first labours; three in their second; and the remaining severally in their third, sixth, ninth, and twelfth.

The cause of death was,—

Puerperal fever and inflammation in	7 cases
Puerperal convulsions in	2 ...
Chest disease in	1 ...
Fatal sinking after incision of a carcinomatous os uteri in	1 ...
Total,	11 deaths.

The delivery was effected by the natural efforts in nine of the cases; by the forceps in one of the cases dying of puerperal fever; by turning in one of the cases dying of convulsions,—the body, on dissection, presenting a large clot of effused blood in the brain, and a collection of pus in one of the kidneys. In the case where the os uteri was incised for carcinoma, the mother had been in labour for two or three days, and the pulse had become very rapid, &c., before the operation was adopted. The child was subsequently born in the course of four or five pains. But the pulse never rallied after delivery, and she died of the third day.

I have merely further to add, that the convalescence of the hospital patients was often interrupted by febrile and inflammatory attacks. The house, No. 3, St John Street, used as an hospital, was, in addition to a sunk kitchen flat, three storeys in height, with two rooms in the first and second flats, and three in the third; and it was much too small for the accommodation of the patients, and of the resident house-surgeons, matron, &c. The rooms themselves were low-roofed, and very imperfectly ventilated. Various plans were attempted to improve the ventilation, but not with much success. Whenever the hospital became in any degree crowded, fevers (or weeds), with more or less abdominal tenderness, appeared among the patients; and frequently the supervention of such attacks during convalescence became so common, as to constitute the rule rather than the exception to it. Every one acquainted with hospital practice, whether obstetric, surgical, or medical, is well aware of the great liability among the patients to febrile and inflammatory attacks whenever the wards are overcrowded; and in no practice is this more visible than in midwifery. Indeed, I believe there are few or no circumstances which would contribute more to save surgical and obstetric patients from phlebitic and other analogous disorders, than a total change in the present system of hospital practice. I have often stated and taught, that if our present medical, surgical, and obstetric hospitals were changed from being crowded palaces, with a layer of sick in each flat, into villages or cottages, with one, or at most two patients in each room, a great saving of human life would be effected. And if the village were constructed of iron (as is now sometimes done for other purposes), instead of brick or stone, it could be taken down and rebuilt every few years; a matter apparently of much moment in hospital hygiene. Besides, the value of the material would not greatly deteriorate from use; the principal outlay would be in the first cost of it. It could be erected in any vacant space or spaces of ground, within or around a city, that chanced to be unoccupied; and, in cases of epidemics, the accommodation could always be at once and readily increased.